

LATE TRIASSIC HOMOPTEROUS NYMPH FROM DINMORE, IPSWICH BASIN. *Memoirs of the Queensland Museum* 33(1): 360. 1993:- This well-preserved homopterous nymph was collected by Mr Robert Knezour from plant fossil-rich mudstone underneath powerlines in a quarry (Queensland Museum [QM] L471) at the end of Roberts St, Dinmore in the Ipswich Basin (27°31'S, 152°51'E). The sediments belong to the Blackstone Formation of the Ipswich Coal Measures. Palynological data suggest a Late Triassic (Carnian) age (deJersey, 1970). Details of stratigraphy and age were given by Rozefelds & Sobbe (1987) who noted other insects (Blattodea, Hemiptera and Coleoptera) in association with a typical *Dicroidium* macroflora.

Order HEMIPTERA

Suborder HOMOPTERA

Superfamily UNCERTAIN

The head with the rostrum arising from the frons near the rear of the head suggests an homopterous form but its relationships are uncertain because comparable nymphs are extremely rare in the fossil record. Of the several homopterous nymphs known (Riek, 1974 and references therein) none are similar to the new form being mainly Sternorrhyncha whereas this fossil is more like Auchenorrhyncha nymphs (Carpenter, [1992] did not report any nymphs in families referable to the Auchenorrhyncha). Because several critical features are unclear on the fossil, comparison with nymphs of Recent forms can only be superficial and therefore inconclusive. However, it does suggest similarity to Fulgoroidea. The excessively long rostrum, patches of sensory abdominal tubercles, and long coxae based well away from the midline are known in modern Fulgoridae. However, unlike the fossil described here, coxae of the third fulgorid leg are fixed in the sternite and the free part of the leg begins at the tibia. Familial assignment must remain open.

***Knezouria* gen. nov.**

Type species: Knezouria unicus sp. nov.

Remarks. Although it is possible that this nymph belongs to a named fossil species, there is no way of determining its morphogenetic development and no way of relating it to an adult. Therefore, a separate binomial name is justified for a fossil that cannot be assigned to an existing taxon and that is likely to be referred to often.

***Knezouria unicus* sp. nov. (Fig. 1)**

Etymology. Latin *unicus*, sole, one only.

Material. Holotype QMF18850a,b (part & counterpart), ventral surface only.

Description. Nymph with rudimentary wings (most obvious posterolaterally on thorax); 13mm long, 7mm wide, abdomen half length of animal. Frons large, diamond-shaped, with subtle transverse and longitudinal ridges meeting at midpoint; rostrum very slender, extending beyond the posterior margin of the abdomen (preserved as an indistinct ridge curving off the midline along the thorax then crossing the midline near abdominal midlength); posterior of head indistinct.

Legs with long, stout, oblique coxae, based away from midline and running to midline; femora strong, similar, running obliquely to margin; tibia long, slender, may have fine

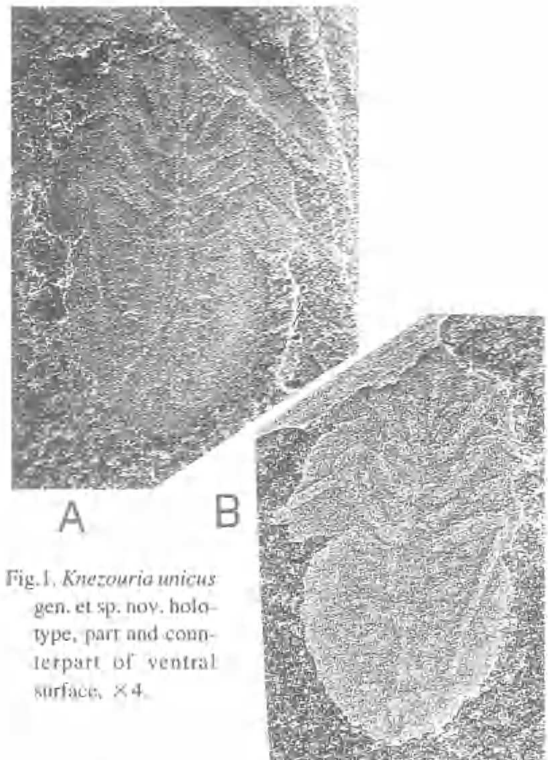


Fig. 1. *Knezouria unicus* gen. et sp. nov. holotype, part and counterpart of ventral surface, $\times 4$.

spines on inner edge; tarsi 0.3 length of tibia, gently curved; pretarsus with two claws.

Abdomen inverted beehive shape, 8 segments clearly evident, with distinct, narrow, median longitudinal ridge, with paired areas of small tubercles on each segment (each one associated with a sensory hair, by analogy with modern Homoptera). Terminal (8th) segment with anal and genital structures in median line well forward of margin, in form of two pairs of lobes directed posteriorly, each pair forming an indistinct U-shaped structure.

Acknowledgements

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Peter A. Jell. Queensland Museum, PO Box 3300, South Brisbane, Queensland 4101, Australia; 22 December, 1992.